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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/834,187	04/12/2001	Abang Abdullah B. Abang Ali	S1436/7001	2651

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EXAMINER

MCDERMOTT, KEVIN

ART UNIT	PAPER NUMBER
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3635

DATE MAILED: 02/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/834,187

Applicant(s)

ABANG ALI ET AL.

Examiner

McDermott, Kevin

Art Unit

3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 13.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to because the changes to figure 6 provided in the 12/02/02 Amendment do not completely label the three views as "6A", "6B", and "6C". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 3 is objected to because of the following informalities:

Line 10 recites "is integral". Integral with what? Examiner interpreted the support web 17 as being integral with the sidewalls.

Line 10 also recites "spans said sidewalls". Does Applicant intend this to mean that the support web 17 spans between the sidewalls? Examiner interpreted it as such.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5-12, and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Haener (U.S. Patent No. 4,640,071).

Regarding claim 1, Haener discloses in column 2, lines 30-42, blocks that are designed to interlock at their opposite ends by means of tongues and grooves, or the like, to form courses. The courses may be disposed on one another without the use of mortar, with the blocks in one course staggered with respect to those of the adjacent courses. The upper portions of the webs in a given course are positioned to point contact the underside of the webs of the course next above to interlock the blocks and courses together. The cells thereof are in staggered array and exhibit angled walls and a greater surfaces area for joinder to concrete when the latter is poured into vertically connected cells to strengthen the thus formed wall.

More specifically, Haener discloses block 20 in figures 1 and 2. Block 20 is the claimed stretcher block. Haener discloses block 20' in figures 3 and 4. Block 20' is the claimed corner block. Haener discloses block 20a in figures 9 and 10. Block 20a is the claimed half block.

Regarding the stretcher block, Haener discloses in figures 1 and 2 and in column 3, lines 38-64, a block 20 comprised of a spaced, parallel pair of vertical sidewalls 22, 24 interconnected by integral vertical webs 26, perpendicular to sidewalls 22, 24 and disposed in a predetermined arrangement in block 20. Preferably, each of the sidewalls 22, 24 have flat parallel or tapered opposite faces 34, 36, flat bottoms 38 and flat tops 40. Opposite ends 28, 30 of walls 22, 24 are provided with interlocking means in the form of tongues 32 and grooves 33 for joining blocks 20 lengthwise in a course during laying up of a wall. Webs 26 and sidewalls 22, 24 divide block 20 into cells 42, 44, 46, 48, 50 spaced along the length of block 20 and open at the bottom and top thereof.

Webs 26 extend above the top surface of block 20. Figures 1 and 2 show webs 26 spaced from the second end (the right end) of block 20. A first web 26 is spaced from the right end and the second, third and fourth webs 26 are all also spaced from the right end of block 20. More specifically, a web 26 is located at the first end and a web 26 is also located so that it is spaced from a second end of the block 20. Examiner interprets "at" as recited in claim 2 broadly. Examiner suggests that Applicant more specifically define the location of the first transverse wall.

Regarding the corner block, Haener discloses in figures 3 and 4 and column 4, lines 57-68, a block 20' whose components are similar to those of block 20. The reference numbers are the same but they have a prime sign. Column 4, lines 57-60 disclose the block 20' being a corner form of the same embodiment as that of figures 1 and 2. Consequently, the length of block 20' is the same as block 20. Block 20' comprises spaced, upright, parallel sidewalls 22', 24' having flat top and bottom surfaces and interlocking means 32', 33'. End wall 80 is the claimed first transverse end wall extending between the sidewalls 22', 24' at a first end of the block 20' and is also spaced from the second end of block 20'. Web 26' is the claimed second transverse end wall extending between the sidewalls 22', 24' spaced from the second end of the block 20'. The pair of spaced vertical supports 82, 84 are integrally connected to sidewalls 22', 24', respectively, and are disposed in space 86 between wall 80 and web 26'. The vertical supports 82, 84 are the claimed protrusions on the inside of the sidewalls 22', 24' and extend from a base substantially co-planar with the

sidewall bottom surfaces and have a tip extending above the sidewall top surfaces configured to interlock with a block in a next succeeding course.

Regarding the half block, Haener discloses in figures 9 and 10 and in column 5, lines 47-66, block 20a that is substantially identical to block 20, except it contains only two webs 26a, rather than four webs 26. Because block 20a contains only half as many webs it is half the length of blocks 20 and 20'. Additionally, block 20a is comprised of two sidewalls 22, 24 comparable to block 20, and two transverse end walls/webs 26a spaced from a second end of the block 20.

Regarding claims 5 and 11, the tongues 32/32' and grooves 33/33' comprise male and female interlocking means, respectively.

Regarding claims 6 and 12, because Haener discloses the structural limitations of the claimed block, namely the tongue 32 and groove 33 interlocking means, the block 20 of Haener inherently provides self-alignment features to the block system.

Regarding claims 7 and 17, column 4, lines 47-50 disclose disposing reinforcing cement in the cells 42, 44, 46, 48, and 50. Cement is stability and stiffening means. This teaching applies to the cells of each embodiment.

Regarding claims 8 and 18, because Haener discloses the structural limitations of the claimed block, the block 20/20' of Haener is inherently capable of being used in the same way – such as for the construction of door and window openings.

Regarding claims 9 and 19, because Haener discloses the structural limitations of the claimed block, the block 20/20' of Haener is inherently capable of being used in the same way – such as to house lintels without requiring the use of form work.

Regarding claims 10 and 20, because Haener discloses the structural limitations of the claimed block, the block 20/20' of Haener is inherently capable of being used in the same way – such as to provide for the construction of load and non-load bearing walls.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4, 13-16, and 21-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haener (U.S. Patent No. 4,640,071).

Regarding claim 3 and the corner block Haener's disclosure is discussed above. However, Haener (U.S. Patent No. 4,640,071) does not disclose the block-interlocking means being located on opposite ends of the sidewalls and a transverse upright support spanning between the sidewalls 22', 24'.

As discussed above, Haener also discloses block 20. Block 20 comprises interlocking means 32, 33 disposed on opposite ends of the sidewalls 22, 24. Additionally, block 20 comprises webs 26 located between the end walls to define cavities for receiving cementitious material. These webs 26 span the space between the sidewalls 22, 24 and are integral with the sidewalls 22, 24.

Therefore, Examiner considers it obvious to one of ordinary skill in the art at the time the invention was made to modify the block 20 so that interlocking means are

located on opposed ends of the sidewalls 22, 24, and to provide webs between the end walls to form concrete receiving cavities.

One of ordinary skill would be motivated to make such a modification to provide an improved mortarless building block featuring improved adaptability, strength, and economy, as discussed in col. 1, lines 48-50.

Regarding claim 11, the tongues 32 and grooves 33 comprise male and female interlocking means, respectively.

Regarding claim 12, because the claimed combination is obvious as explained above, the combination discloses the structural limitations of the claimed block, namely the tongue 32 and groove 33 interlocking means. This interlocking means provides self-alignment features to the block system.

Regarding claim 17, column 4, lines 47-50 disclose disposing reinforcing cement in the cells 42, 44, 46, 48, and 50. Cement is stability and stiffening means. Col. 2, lines 38-42 of the specification generally teach filling the cells of all the embodiments with concrete to strengthen the wall.

Regarding claim 18, because the combination as discussed above discloses the structural limitations of the claimed block, the modified block 20 is capable of being used in the same way – such as for the construction of door and window openings.

Regarding claim 19, because the combination as discussed above discloses the structural limitations of the claimed block, the modified block 20 is capable of being used in the same way – such as to house lintels without requiring the use of form work.

Regarding claim 20, because the combination as discussed above discloses the structural limitations of the claimed block, the modified block 20 is capable of being used in the same way – such as to provide for the construction of load and non-load bearing walls.

Regarding claim 4 and the half block 20a, Haener's disclosure is discussed above. However, Haener (U.S. Patent No. 4,640,071) does not a protrusion on the inside of the sidewalls, extending from a base substantially co-planar with the sidewalls bottom surface and having a tip extending above the sidewall top surfaces configured to interlock with a block in the next succeeding course.

As discussed above, Haener also discloses block 20'. Block 20' comprises a pair of spaced vertical supports 82, 84 that are integrally connected to sidewalls 22', 24', respectively, and are disposed in space 86 between wall 80 and web 26'. The vertical supports 82, 84 are the claimed protrusions on the inside of the sidewalls 22', 24' and extend from a base substantially co-planar with the sidewall bottom surfaces and have a tip extending above the sidewall top surfaces configured to interlock with a block in a next succeeding course.

Therefore, Examiner considers it obvious to one of ordinary skill in the art at the time the invention was made to modify the block 20a to comprise vertical supports 82, 84 on the inside of the sidewalls 22, 24 and extend from a base substantially co-planar with the sidewall bottom surfaces and have a tip extending above the sidewall top surfaces configured to interlock with a block in a next succeeding course.

One of ordinary skill would be motivated to make such a modification to provide an improved mortarless building block featuring improved adaptability, strength, and economy, as discussed in col. 1, lines 48-50.

Regarding claim 15, the tongues 32 and grooves 33 comprise male and female interlocking means, respectively.

Regarding claim 16, because the claimed combination is obvious as explained above, the combination discloses the structural limitations of the claimed block, namely the tongue 32 and groove 33 interlocking means. This interlocking means provides self-alignment features to the block system.

Regarding claim 25, column 4, lines 47-50 disclose disposing reinforcing cement in the cells 42, 44, 46, 48, and 50. Cement is stability and stiffening means. Col. 2, lines 38-42 of the specification generally teach filling the cells of all the embodiments with concrete to strengthen the wall.

Regarding claim 26, because the combination as discussed above discloses the structural limitations of the claimed block, the modified block 20' is capable of being used in the same way – such as for the construction of door and window openings.

Regarding claim 27, because the combination as discussed above discloses the structural limitations of the claimed block, the modified block 20' is capable of being used in the same way – such as to house lintels without requiring the use of form work.

Regarding claim 28, because the combination as discussed above discloses the structural limitations of the claimed block, the modified block 20' is capable of being

used in the same way – such as to provide for the construction of load and non-load bearing walls.

Response to Arguments

Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

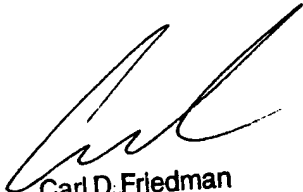
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Kevin McDermott, whose telephone number is 703-308-8266.



Carl D. Friedman
Supervisory Patent Examiner
Group 3600

KM 2/10/03